

AMENDMENT UNDER 37 C.F.R. § 1.111
U. S. Application No. 09/489,846

2, storing the plurality of processed abnormal pattern results and the plurality of corrected abnormal pattern results.

Sub C
2. (Amended) An abnormal pattern detection processing method according to claim 1, wherein quantitative evaluation of the detection processing is performed, on the basis of said stored plurality of processed abnormal pattern results and said stored plurality of corrected abnormal pattern results.

3. (Amended) An abnormal pattern detection processing method comprising:

§ 2 detecting an abnormal pattern in an image, based on inputted image information;

§ processing the detected abnormal pattern;

§ 3 performing a pattern reading assessment using the image information;

§ 1 performing a pathologic assessment of the abnormal pattern;

Alt con
relating a result of the detected abnormal pattern processing and a result of the pattern reading assessment to a result of the pathologic assessment, for each of a plurality of items of the inputted image information; and

storing the plurality of processed detected abnormal pattern results, the plurality of pattern reading assessment results and the plurality of pathologic assessment results.

4. (Amended) An abnormal pattern detection processing method according to claim 3, wherein quantitative evaluation of the pattern reading assessment is performed, on the basis of said stored plurality of pattern reading assessment results and said stored plurality of pathologic assessment results.

AMENDMENT UNDER 37 C.F.R. § 1.111
U. S. Application No. 09/489,846

5. (Amended) An abnormal pattern detection processing system which detects and processes an abnormal pattern in an image represented by image information on the basis of inputted image information, comprising:

a means relating a result of said detection processing to a corrected detection processing result, for each of a plurality of items of said image information; and

memory means storing the plurality of detection processing results and the plurality of corrected detection processing results.

6. (Amended) An abnormal pattern detection processing system according to claim 5, further comprising evaluator means for performing quantitative evaluation of the detection processing on the basis of said plurality of results of detection processing and corrected detection processing results stored in said memory means.

7. (Amended) An abnormal pattern detection processing system, which detects and processes an abnormal pattern in an image represented by image information on the basis of inputted image information, comprising:

a means relating a result of said detection processing and a result of a pattern reading assessment using said image information to a result of pathologic assessment concerning said abnormal pattern, for each of a plurality of items of said image information; and

memory means storing the plurality of detection processing results, the plurality of pattern reading assessment results and the plurality of pathologic assessment results.

AMENDMENT UNDER 37 C.F.R. § 1.111
U. S. Application No. 09/489,846

8. (Amended) An abnormal pattern detection processing system according to claim 7,
further comprising evaluator means for performing a quantitative evaluation of the pattern
reading assessment on the basis of said plurality of pattern reading assessment results and the
plurality of pathologic assessment results stored in said memory means.

Please add the following new claims:

9. (New) The method of claim 2, wherein the corrected abnormal pattern results
comprise a determination of whether the processed abnormal pattern corresponds to at least one
of a true positive, false positive, true negative and false negative.

10. (New) The method of claim 9, wherein the quantitative evaluation comprises a ratio
of a number of true results relative to a number of true and false results.

11. (New) The method of claim 10, wherein a sensitivity of the quantitative evaluation
is determined by the ratio of true positives to a sum of true positives and false negatives.

12. (New) The method of claim 10, wherein a specificity of the quantitative evaluation is
determined by the ratio of true negatives to a sum of true negatives and false positives.

13. (New) The method of claim 10, wherein a positive predictive value of the
quantitative evaluation is determined by the ratio of true positives to a sum of true positives and
false positives.